

Imperial College London

Hello friends of Hazelab! Welcome to another update from Hazelab at Imperial College London. For more news, follow us on twitter @ImperialHazelab, visit our [website](#) or watch our [video](#).

Graduating Students

Dr. Han Yuan & Dr. Zhenwen Hu came back to Imperial with their families to participate in the Ph.D. graduation ceremony, held annually at Albert Hall, it was exciting! We are also very happy to congratulate Dr. Simona Dossi for completing her Ph.D. on protecting communities from wildfires. Cheers to the new graduate! Best wishes for your future!

As usual, every new member of Hazelab writes a research statement and takes a photo at their favourite location. Dr. Hafizha (Afi) Mulyasih chose to take a photo in front of an iconic Imperial Guild clock, and Dr. Carlos Walker-Ravena chose to take a photo in the Hyde Park area near Imperial College London with an equestrian statue called Physical Energy in the background, a symbol of the dynamic force of ambition, very philosophical!



Conferences and Outreach

Several trips to various locations in the UK and other countries were made to attend in-person activities such as presentations, conferences, and visits.

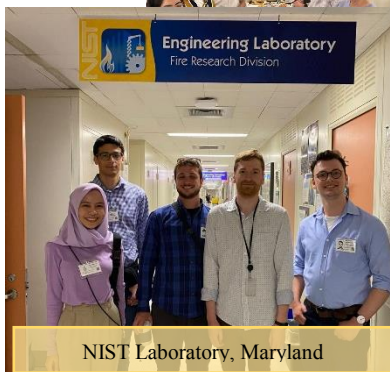


Harry Mitchell, Rikesh Amin, Dr. Matt Bonner and Simona presented their work at the SFPE Conference in Berlin 2023. Nick Kalogeropoulos and Carlos travelled to Cyprus in May to introduce themselves to the Cypriot team. Imperial College London conducted a research showcase for Wildfires and Battery research on 11 May, and Harry presented about Timber Fire. The day after, Harry went to Edinburgh to attend the Structures in Fire Forum (STiFF). Indeed, he is the most mobile person!

Then, from the end of May to the beginning of June, Harry, Nick, Carlos, and Afi went to Washington DC, USA, to visit NIST. While at NIST, we met Eric Mueller, one of the

researchers at NIST. We presented our research overview and had the chance to tour the lab, which was very impressive.

A few days later, we attended the summer school at UMD! Prof. Guillermo Rein gave a lecture there about smouldering wildfires. All of the lecturers provided knowledge and research findings that were insightful and fascinating, and the students were also extremely exceptional. Additionally, we had the chance to display the findings of our investigation as posters. Hopefully, activities like this will continue every year!



One of the most important things to remember is that June 1st is the anniversary of Imperial Hazelab! This is the 11th year! we celebrated by buying a cake, then we decorated it ourselves! It was so funny!



The World Conference on Timber Engineering, Oslo

Harry attended the World Conference on Timber Engineering in Oslo, Norway on June. He was presenting on the smouldering of mass timber! On another occasion, Imperial held a research poster exhibition to celebrate International Women in Engineering Day on June 20, and Afi participated in showcasing her research on peat fire suppression methods, which was part of her PhD thesis research.

Rik also presented his research using AI to improve the safety of tall-timber construction during the Ph.D. Research Poster Showcase held at Imperial in July. In the same month, Nick and Afi attended the Leverhulme Wildfire Summer Conference which was held on July at Imperial College London. They each presented their research posters.



The Leverhulme Wildfire Summer Conference, London

In other news, Guillermo visited the UL Research Annual Symposium at Evanston, USA, in August. The conference's events appeared to be really exciting!



The UL Research Annual Symposium, Evanston

Francesca Lugaresi, Nick and Harry's papers are accepted in the Fire Safety Journal and will be presented at the IAFSS Conference in Tsukuba, Japan, in October 2023! Can't wait for the next excitement!

Follow this link to [Hazefiles](#), our repository of papers and reports!

Visitors

Without visitors, Hazelab days would not be as lively. Visitation activities can improve communication between researchers. Recently, we've had some visitors who came to present their research as well as to see the lab. The Hazelab team is delighted to have them join us and looks forward to welcoming many more guests!

Dr. Thomas Smith from the London School of Economics presented his work on tropical peatland fires in Indonesia and Malaysia. We really enjoy learning about the socio-environmental perspective of peat fires.

Dr. Nieves Anez and colleagues from HVL, Norway, visited us in April. During those days, we shared and discussed various interesting fire science-engineering studies.



Dr Nieves Anez and colleagues at HVL visiting Hazelab, April 2023

Seminar: Ed Ang
How safe is safe, and for how long? - An Engineering Design Perspective



Bio: Ed Ang is a technical director at AECOM Australia, and a PhD researcher with Hazelab. With over 16 years of industry experience, he is a chartered professional engineer in Australia and the UK, specialising in mechanical and fire safety. Throughout his career, Ed has been involved in various large-scale infrastructure and building projects as a multidiscipline design manager, project manager, or specialist.

Abstract: In this seminar, Ed Ang will explore the challenges that engineers face when designing safe and sustainable infrastructure and buildings. With a focus on actual project design, Ed will examine the various factors that govern safety and discuss how new technologies and climate change impact safety considerations. Specific examples, such as tunnels that need to consider changing vehicle technologies will be discussed. This is intended as a dialogue, and please join us to explore the implications of designing safe infrastructure and buildings in a rapidly changing world.

2nd May 13:00 – 14:00 GMT
 g.rein@imperial.ac.uk
 CAGB 575 and Online



In May, Ed Ang an engineer at AECOM and a Ph.D. researcher at Hazelab, gave a webinar talk about an engineering design perspective. In this seminar, he explored engineers' challenges when designing safe and sustainable infrastructure and buildings. He discussed how new technologies and climate change impact safety considerations.

Dr. Augustin Guibaud from UCL talked about fires in microgravity and his series of experiments aboard the famous zero G parabolic flights when he visited us in May.

Prof. John Gales and his student from York University, Canada, came to our lab! We had extensive discussions regarding the building's structure, fire risk, and human behaviour towards means of egress.



Dr. Michael Kinsey from Movement Strategies and UK colleagues visited Hazelab and talked about how people will behave during a fire evacuation to ensure the buildings are safe. This discussion was really fascinating!



Researchers led by Prof. Longhua Hu from the **University of Science and Technology China (USTC)** presented their current research on external fires from compartments, where they conducted a number of experiments on their large fire laboratory. Very exciting research!



The new EU ambassador to the UK, Pedro Serrano, came to visit the college this year, and among the labs and people he visited was Hazelab. The research group discussed our current work with him and the importance of our European collaborators. From an article about the visit: "They

discussed how the group works with partners across Europe and beyond to reduce the worldwide burden of accidental fires and their impact on people, property and the environment, for example through different building regulation and community action."

In a similar vein, the Chinese Minister Councillor for Education Affairs, Ms. Zhang Jin, visited Hazelab, where we discussed our work on fire, the contributions of our numerous Chinese graduates, and the opportunities the Chinese government provides to Chinese students to join Imperial.



Awards

Afi won a prize for the best poster on fire in relation to land management, conservation, livelihoods and health in the Leverhulme Wildfires Conference.

Congratulations to Nick, who successfully got the Spring 2023 Student Research Grants from work on wildfire evacuation by the SFPE Foundation!

We are thrilled to announce that Harry received the 2022 Dr. Ashraf Ben El-Shanawany Memorial Award, which highlights a student in the Imperial Mechanical Engineering Department who has shown exemplary research, innovation, and outreach to the public during their studies. Harry attended the award ceremony to grab the medal!



SFPE Greater London Student Chapter

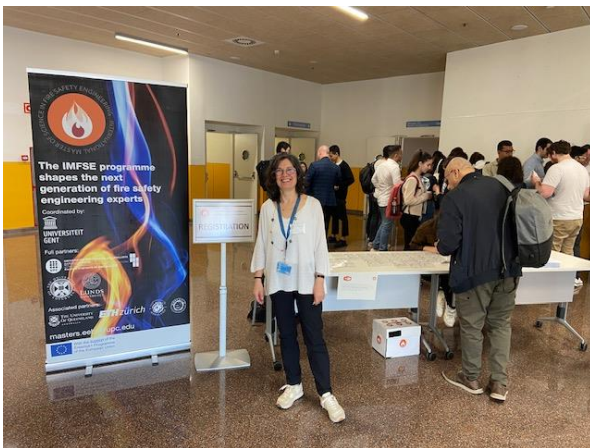
The SFPE Greater London Student Chapter has been busy organising Fired Up, when held on 27 – 29 July 2023, an event by students for students! Fired Up is an event for students to present their work without feeling academic pressure, to practice their presentation and question-answering skills, or to explore the vast network of fire research in the UK. The two days' event was a success!

Signed: Nikolaos and Afi, Edits by Harry and Guillermo

International Master of Science in Fire Safety Engineering

8th IMFSE Fire Safety Engineering Day at UPC in Barcelona

On 28 April 2023 the 8th IMFSE Fire Safety Engineering Day was held with 'Fire Safety Challenges of New Energy Vectors' as the central theme of the day. Approximately 50 IMFSE students, several IMFSE academics from the core partner institutes and representatives from several IMFSE contributing companies participated in this event. This event was truly remarkable as it was organized at Universitat Politècnica de Catalunya (UPC), which became one of the IMFSE full partner universities since September 2022.



IMFSE Graduation ceremony: class of 2023

On 22 June, the IMFSE class of 2023 graduated in Ghent during the IMFSE Graduation Ceremony. It was a wonderful event where all graduating students gave a thesis presentation and presented their thesis poster. There were also several speeches given by some of our alumni and program directors. The evening activity involved food, music and comedy. Congratulations to all graduates! Check out our [Facebook page](#) for more pictures.



New IMFSE Contributor: Danfoss

Recently IMFSE welcomed [Danfoss](#) as one of the IMFSE contributing companies. The financial contribution of the